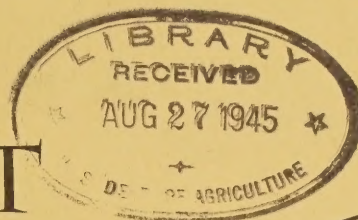


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Migration *and* Settlement

ON THE

PACIFIC COAST



✓
REPORT No. 8



NEW SETTLERS IN YAKIMA VALLEY, WASHINGTON

BY
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AND
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UNITED STATES DEPARTMENT OF AGRICULTURE

BUREAU OF AGRICULTURAL ECONOMICS

IN COOPERATION WITH

WASHINGTON AGRICULTURAL EXPERIMENT STATION

This publication is one of 12 proposed reports dealing with the problems of migration and settlement on the Pacific Coast. Report No. 4, "New Farms on New Land", was issued January 1941; report No. 5, "Cut-Over Land of Northern Idaho", in February 1941; report No. 6, "Cut-Over Land in Western Washington", in August 1941; and report No. 7, "Land Clearing with the Bulldozer", in August 1941. The present report was done in cooperation with the Washington Agricultural Experiment Station, which has also published the results in its bulletin No. 397, "The Adjustment of New Settlers in the Yakima Valley, Washington". The studies have three major segments: State-wide surveys of migration to the Far Western States, detailed field surveys on a sample basis of the economic situation and prospects of migrants who have relocated in these States, and an appraisal of the more important public policies affecting the settlement of the migrant group.

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NEW SETTLERS IN YAKIMA VALLEY, WASHINGTON

by

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PURPOSE OF THE STUDY

Migration has been viewed as an essential means of bringing people and economic opportunity into equilibrium. According to this view people migrate out of an area of shrinking economic opportunity into one of expanding, or at least of more favorable, opportunities. Although this interpretation has validity, the movement of peoples in concrete instances does not follow the strictly economic explanation, for the better opportunities toward which migration is directed may prove in actuality to be imaginary and unreal. Further, the costs of migration, involving the severance of intangible bonds of devotion to family and loyalty to local institutions, or financial loss through excessive depreciations in property values, often are greater than the individual is willing to bear. To many persons a comfortable if meager security in a declining area is preferable to the gamble of success and satisfactory personal adjustment in a new environment. Thus, while migration may be considered as basically an adjustment of people to resources, both natural and cultural, the moderating influences of subjective human values alter the inexorability with which the pressure of expulsive forces or the attraction of impelling factors might otherwise weigh upon the individuals affected by changing opportunities.

Before the last decade the incentive to migration was largely an impelling one of expanding opportunities elsewhere--in the West or in the industrialized cities. But during the decade of the 1930's opportunities contracted everywhere, and particularly in the Great Plains, as the result of droughts, low crop prices, and mechanization. Therefore, migration during this decade, motivated primarily by expulsive forces, resulted from contracting opportunity at home rather than expanding opportunity elsewhere.

The largest migration was into California, but significant numbers came also to the States of the Pacific Northwest, where they settled primarily in the cities, the irrigated valleys, and on logged-over timber lands. Although some of them have become engulfed in the migratory labor stream and some have returned to the Great Plains, many others have settled in communities of the region in anticipation of developing permanent homes. The fundamental question arises, with what success are

the newcomers making their adjustments in the new environment? This report provides information in answer to this question for a limited segment of the migrant population, examining the adjustments that families formerly engaged in farm operation and farm labor have been able to make in a new environment.

This study, made in 1939, was primarily concerned with measuring the success or lack of success of former migrants of agricultural background in relocating in a new environment. It undertook, therefore, to describe the characteristics of the newly settled population, to measure their economic progress in the new environment and their accommodation to the new social environment, to ascertain the extent, regularity, and source of their employment and income, to venture certain opinions regarding the capacity of the Yakima Valley to absorb new settlers, and to appraise the probable future for those former migrants now settled in the area. It undertook these inquiries in the expectation that the resultant data might facilitate the direction of public action in assisting the settlers to secure the maximum adjustment possible within their new environment.

THE AREA SURVEYED

Lying in the south-central portion of the State of Washington, the Yakima Valley 1/ is an area irrigated by the waters of the Yakima River, along the course of which lives virtually the entire population of Yakima County. The business and cultural center of the county is the city of Yakima, with a population of 27,221 in 1940. The only other urban area within the county is Toppenish, with a population of 3,683, 20 miles distant from Yakima. In addition, a number of smaller towns are service centers for their surrounding populations.

The Nature of the Farm Enterprise

Yakima County is still an expanding area in number of farms and acreage in farms. Between 1910 and 1930 the number of farms increased from 3,341 to 6,806, increasing further to 7,092 in 1935. Acreage in farms increased from 321,000 acres in 1910 to 598,000 in 1930 and 690,000 in 1935. Average acreage per farm showed no change over the quarter century, but there were significant changes in other respects. Acreage devoted to crops and to plowable pasture decreased from a peak of 277,060 acres for the crop-year 1924 to 249,801 acres for the crop-year 1934, showing that most of the increase in farm land came from increased use of nonarable land for pasture. Furthermore, there has been a fairly persistent trend toward farms of less than 20 acres, particularly to units under 10 acres. Since 1910 an increasingly larger proportion of farms has been of less than 50 acres in size. In 1935 those of less than 50 acres comprised 70.7 percent

1/ For purposes of this report the Yakima Valley includes only that portion lying within Yakima County.

of all farms in the county (table 1). This figure clearly indicates the small farm units that are customary in the county.

Table 1.- Percentage distribution of farms in Yakima County by size, 1910-35 ^{1/}

	: : 1910 :	: : 1920 :	: : 1925 :	: : 1930 :	: : 1935 :
Number of farms	: 372	: 720	: 815	: 985	: 1,062
	Percent of all farms				
Under 10 acres	: 11.1	: 12.5	: 12.8	: 14.5	: 15.0
10 - 19 "	: 18.1	: 18.3	: 20.0	: 19.7	: 20.5
20 - 49 "	: 36.2	: 36.7	: 35.4	: 34.4	: 35.2
50 - 99 "	: 15.1	: 17.8	: 19.6	: 18.0	: 17.8
100 - 174 "	: 10.8	: 7.8	: 6.8	: 7.7	: 7.1
Over 174 "	: 8.7	: 6.9	: 5.4	: 5.7	: 4.4
Total	: 100.0	: 100.0	: 100.0	: 100.0	: 100.0

^{1/} Source: U. S. Census of Agriculture.

The gross value of farm crops produced in Yakima County in 1929 was \$31,000,000, an amount exceeded that year by only 5 other counties in the Nation. Although fruit and vegetable farms and farms producing field crops other than hay and grains (principally potatoes, sugar beets, and hops) occupied only 35 percent of the total farm acreage harvested in 1929 and had increased to 40 percent in 1934, they accounted for 79 percent of the value of crops produced in 1929. ^{2/} Fruits alone accounted for 55 percent of the value of crops in 1929 and potatoes for 19 percent. Fruit and crop-specialty farms in the county were generally small, specialized, and highly commercial. Approximately 90 percent of the fruit farms and 50 percent of the crop-specialty farms are of less than 50 acres. Only 3 percent of the fruit farms and 11 percent of the crop-specialty farms had, in 1929, a gross value of production in excess of \$10,000. Practically all of this production was sold, a scant 2 percent of the value of all production on fruit farms and 3 percent on crop-specialty farms being retained for use by the farm family in 1929.

^{2/} Hurd, Edgar B. and Hollands, Harold F. Economic Conditions and Problems in the Yakima Valley, Washington. The Agriculture and Its Setting, p. 39 Washington Agr. Expt. Sta. Bul. 377, Pullman, July 1939.

Hired Farm Labor Requirements

As an economic environment for newcomers without the financial resources to become farm operators, the Yakima Valley exists primarily as a market for their labor. It is upon the nature, size, and continuity of this labor market that the ultimate hope for stable settlement of the new settlers depends. The fruit and crop-specialty farms, which predominate in the valley, have a high requirement for seasonal labor despite their relatively small size. During 1929, a total of \$719,000 was expended in the valley for labor. Three-fourths of all farmers reported the hiring of labor sometime during the year, with an average expenditure of \$1,184. A notably higher proportion of fruit farms, 91 percent, reported the employment of labor, and the average expenditure for labor employed on fruit farms was \$1,534. Corresponding figures for crop-specialty farms show 78 percent of all such farms hiring labor, and \$1,098 expended per farm.

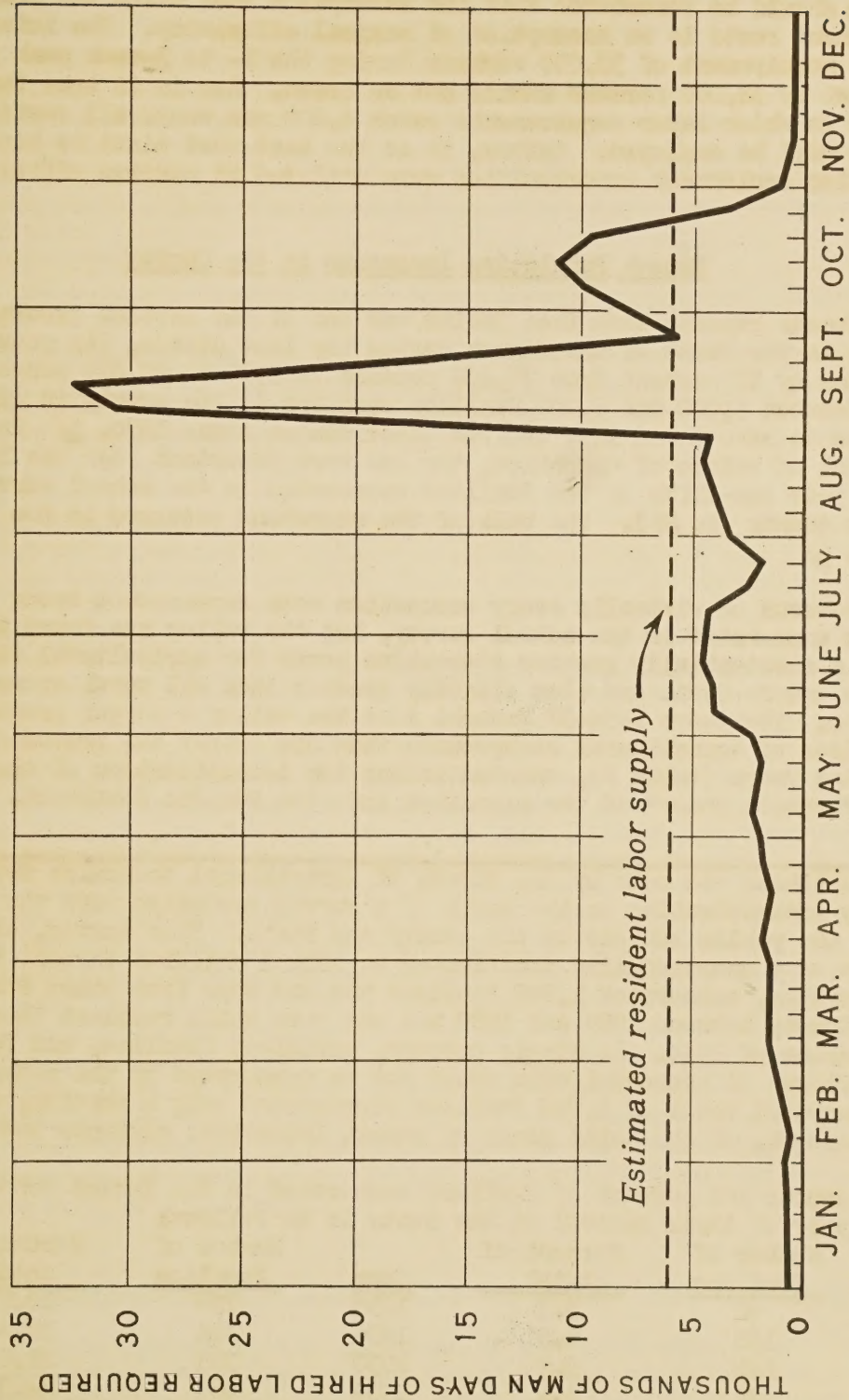
Eighty-six percent of all labor hired in the Yakima Valley was employed on fruit and crop-specialty farms. As crop-specialty farms are principally engaged in the production of potatoes, sugar beets, and hops, the increase in hop acreage since the repeal of prohibition in 1933 and of sugar-beet acreage in the succeeding years has very probably increased the proportion of all labor hired by crop-specialty farms. It has been estimated that, in 1935, at the seasonal peak of the agricultural labor demand, almost 33,000 full-time workers were required. ^{3/} Resident workers available were estimated at 4,000 to 6,000 persons. ^{4/} Assuming 6,000 to be the approximate number of residents available for agricultural labor in the Yakima Valley, an influx of at least 27,000 workers would be necessary during the hop harvest, which represents the peak period of farm labor demand in the valley. It is virtually certain that the number of transient workers exceeded 27,000 as the estimate of need is based on an assumption of full employment. As considerable time is lost in securing work, and more in moving from job to job, there is little likelihood that the crops of the Yakima Valley at the period of peak labor requirements could be harvested by 33,000 workers.

In common with most areas of intensive, highly commercial agricultural production, the Yakima Valley has an extremely seasonal demand for labor, the peak demand being 66 times as great as the seasonal low point. The accompanying chart (fig. 1) provides a measure of the disproportion between the supply of farm laborers and the demand for their services. Based on an assumption of 6,000 resident workers in only 7 weeks during the year are agricultural opportunities found to exist for the full employment of available resident labor whereas, during 11 weeks of the year, opportunities for full employment of less than 10 percent of the resident farm laborers are found.

^{3/} Landis, Paul H. and Brooks, Melvin S. Farm Labor in the Yakima Valley, Washington, Wash. Agr. Expt. Sta. Bul. 343, Pullman, December 1936, p. 29. A full-time worker is defined as one who works 6 days a week and 10 hours a day.

^{4/} Ibid., p. 30.

SEASONAL DISTRIBUTION OF DEMAND FOR HIRED AGRICULTURAL LABOR IN YAKIMA VALLEY



BASED ON PAUL H. LANDIS, "SEASONAL AGRICULTURAL LABOR
IN THE YAKIMA VALLEY" MONTHLY LABOR REVIEW, AUGUST 1937

It should be remembered that the assumption upon which the graph of labor demand rests is an assumption of maximal efficiency. The inference that the requirement of 33,000 workers during the 2- to 3-week peak period can be met by 33,000 persons should not be drawn. Nor is it true that in any week in which labor requirements reach 6,000 man weeks all resident laborers will be employed. Rather, it is the best that might be hoped for if existing employment opportunities were utilized at maximum efficiency.

Recent Population Increases in the County

Census reports show that Yakima was one of the fastest growing counties in the State of Washington during the last decade, its population increasing by 27 percent from 77,402 persons in 1930 to 99,019 persons in 1940. Between 5,000 and 6,000 families residing in the county in 1939 are estimated to have moved into it from other States since 1930. 5/ From the standpoint of volume of migration, the one most important year was 1937. In that year one-fifth of the families enumerated in the school survey came into the county (p. 40). The bulk of the migration occurred in the years 1935-38. 6/

Persons of virtually every occupation were represented among the families enumerated in the school survey, but the valley was found to have exerted a substantially greater attractive power for agricultural families than the entire State and also slightly greater than all rural areas within the State. The years 1934-37 brought into the valley a larger proportion of families of agricultural backgrounds than did either the preceding or succeeding years (table 2), substantiating the identification of these years as the "drought phase" of the migration into the Pacific Northwest. 7/

5/ The estimate was made by the Bureau of Agricultural Economics and the Farm Security Administration on the basis of a survey conducted with the cooperation of the public schools in the county and State. This survey, accomplished by means of a questionnaire distributed to school children through the public school system, enumerated 1,898 families who had come from other States to Yakima County between 1930 and 1939 and who were still resident there in the early months of 1939. As single persons, childless families, and families with children of preschool ages would not be enumerated by the method used, the enumerated total of 1,898 families represented only a portion, estimated at 35 percent, of the total group of recent interstate migrants settling in Yakima.

6/ The number and percent of families enumerated in the Yakima school survey by the year of their arrival in the State is as follows:

<u>Year</u>	<u>Number of families</u>	<u>Percent of total</u>	<u>Year</u>	<u>Number of families</u>	<u>Percent of total</u>
1930	96	5.1	1935	239	12.7
1931	130	6.9	1936	334	17.8
1932	111	5.9	1937	395	21.0
1933	95	5.1	1938	269	14.3
1934	172	9.1	1939	39	2.1

7/ Troxell, Willard W. and O'Day, Paul. Migration to the Pacific Northwest, 1930-1938, Land Policy Rev., January-February, 1940, p. 37.

Table 2.- Percentage of families enumerated in Yakima school survey by year of arrival in Washington and socio-economic occupational background of head

	: 1930-33	: 1934-37	: 1938-39	: All years 1/
Number of families	432	1,140	308	1,896
Occupational background	Percent of all families			
Farmers, farm laborers	28	45	38	39
White-collar groups	17	10	12	12
Skilled laborers	9	10	11	10
Semiskilled laborers	14	9	9	10
Unskilled and servants	13	13	14	13
Unknown and unemployed	19	13	16	16
Total, percent	100	100	100	100

1/ Information on their year of arrival was not available for 16 families.

Evidence pointing to the same conclusion is found in an analysis of the regions from which the new residents came to the county. Whereas before 1935 and in 1938 migrants from the other Pacific States outnumbered those of any other region, in the years 1935-37 those from the Great Plains predominated (fig. 2). Excepting the Pacific States, the leading States from which the new settlers came were North Dakota, South Dakota, Kansas, Montana, Missouri, and Nebraska, more than 100 families coming from each of these six States. Yakima County received a substantially larger proportion of migrants from the Great Plains and fewer from the other Pacific States than did the State of Washington as a whole. Forty-seven percent of the families enumerated in Yakima County, but only 36 percent of those enumerated in the State at large had last resided in the Great Plains. The major portion of this difference is accounted for by a larger element from the Southern Great Plains in Yakima. Thirty-one percent of the Yakima families compared with 38 percent of those in the entire State had last resided in either Idaho, Oregon, or California.

Community Problems Arising from the Recent Population Increase

Clearly reflecting the influence of new settlement, the total enrollment of Yakima County schools jumped 14 percent during the 3 school years 1935-36 to 1937-38 inclusive. Previously the enrollment had been practically stationary. Indeed, before 1935 the elementary school enrollment had been decreasing, forecasting a decline in total school population. In the 1928-29 session, 20,583 pupils were registered; in 1934-35, 20,432 pupils; but in the session ending 1938, the enrollment was 23,267 pupils.

FAMILIES ENUMERATED BY THE SCHOOL SURVEY IN YAKIMA COUNTY, BY YEAR OF ENTRY INTO WASHINGTON, BY REGION OF LAST RESIDENCE

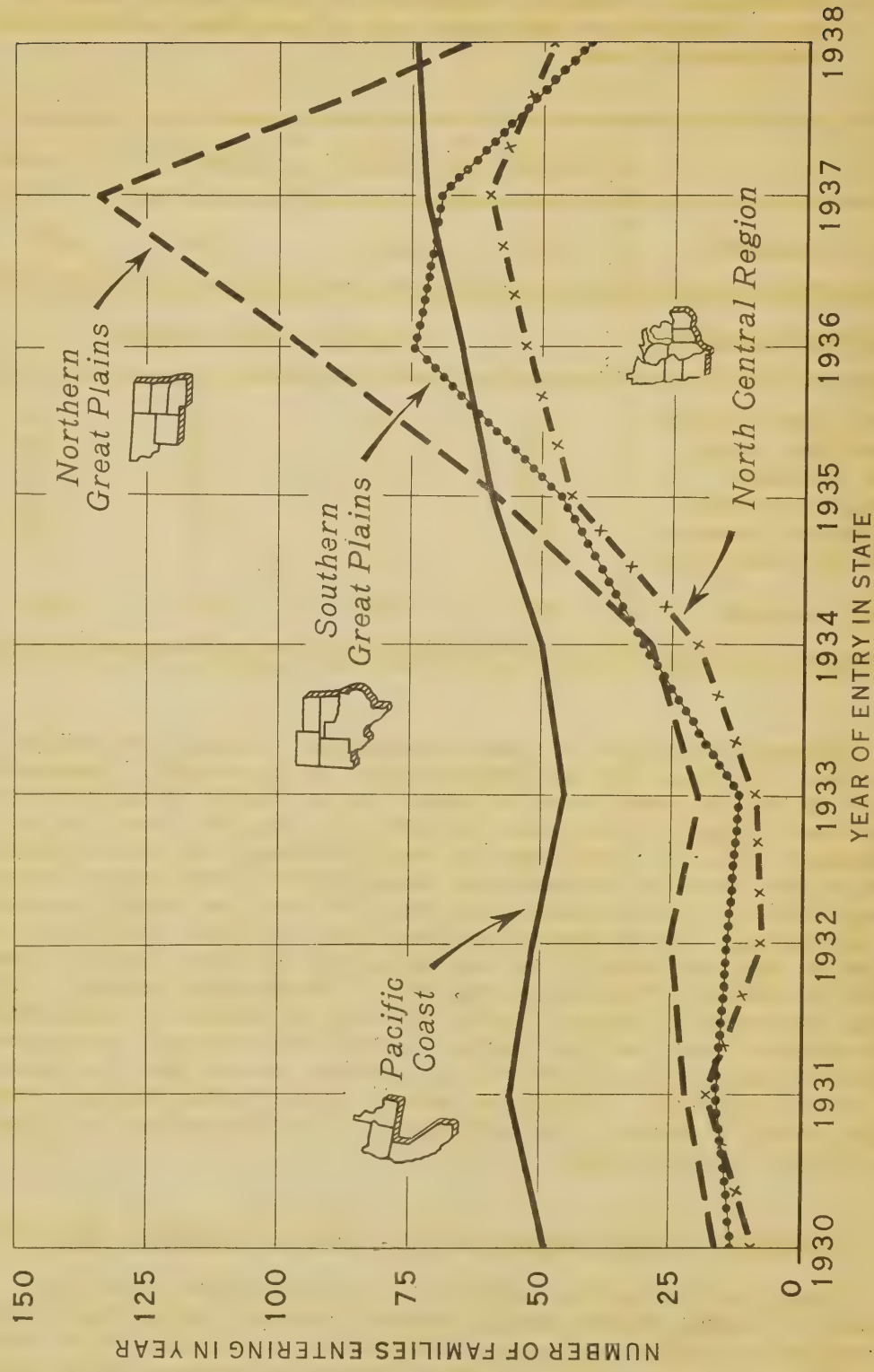


FIGURE 2

Obviously, this sudden sharp increase in school enrollment when, in the absence of normal migration, a declining enrollment was to have been expected, seriously affects school finances. Except for the per diem for each pupil furnished by the State, the funds necessary for instructing the increased number of children must be raised locally, either through taxation or bond issues. In either case, the local tax burden is increased for long-time residents, because the newcomers generally are poor and are not reached by the methods of taxation available to the county.

To ascertain statistically the effect of new settlement upon relief costs in Yakima County is difficult. Figures on general assistance case loads and WPA certifications show no increase following the period of greatest migration. Rather, they reflect the seasonal nature of employment in the valley, the peak case loads occurring usually in February and March when savings from summer and fall employment have been exhausted, the low points coming in November.

A net total of 20,973 persons, deducting duplications, received relief in Yakima County in March 1939, according to figures compiled by the Welfare Department. Computed against the 1940 population of 99,019 persons, this figure indicates that 21.2 percent of the county population was receiving relief in March 1939. On the basis of a sample of 200 cases, representing approximately 5 percent of the total load in March 1939, the Welfare Department estimated that three out of every four relief cases that month represented families who had come to Yakima since 1930. If the sample is representative of the total picture, it indicates that 75 percent of the relief population has come into the county since 1930.

Even before the heaviest migration of the 1930's into Yakima, the labor supply there already exceeded the demand during much of the year. The situation now has become such that in only 5 to 7 weeks during the year can all resident laborers almost certainly find jobs. The cherry harvest provides employment for all for a week or 10 days in June, the hop harvest for 2 to 3 weeks in September and the apple harvest for almost 3 weeks in late September and October. During the remainder of the harvest season competition for available jobs is intense, jobs are of short duration, and periods of unemployment are frequent. Practically no farm work is available during the winter and industrial employment opportunities are almost as scarce, so that nearly all resident farm laborers are unemployed for almost the entire winter.

A tendency toward conflict and animosity between the new settlers, the older residents, and migratory workers in the valley is observable as the result of competition in the labor market. The older residents blame "dust-bowlers" for demoralizing the labor market, the newly settled drought refugees blame the "floaters" or migratory workers, and both the older residents and the migratory workers complain that the new settlers undercut prevailing wages, are willing to work longer hours, and accept inferior working conditions in their desire to strengthen their economic foothold in the new area.

Organized labor leaders almost universally declare that the new residents have been virtually impossible to organize and that their numbers

and their strongly antiunion backgrounds have undermined many gains that organized labor previously had made in the valley.

The most serious health problems arising out of the migration, according to the Yakima County-City health officer, consist in the nature of the housing and the location of the new settlements. Houses of the new settlers often are flimsily constructed, and generally are overcrowded. Most new settlements have sprung up outside the corporate limits of towns where it is unnecessary to connect with sewage disposal systems or comply with certain urban sanitary codes, and thus modern facilities usually are lacking in the new areas. The poverty of recently settled families contributes to each of the above conditions and endangers the health of longer time residents as well. Closely settled areas where crude privies are the only means of sewage disposal and where shallow wells are typical carry the constant threat of typhoid epidemics during the irrigation season when the ground-water level is high. Diseases for which flies act as carriers constitute a summertime potential menace to health in nearly all the areas.

CHARACTERISTICS OF THE NEW SETTLERS INCLUDED IN THE FIELD SAMPLE

Areas of Origin

More than three-fifths of the 250 families interviewed in the field sample were of drought-State origin, with 54 percent from the five drought States, North Dakota, South Dakota, Nebraska, Kansas, and Oklahoma, which lost in population between 1930 and 1940. 8/ This proportion is considerably higher than the proportion of former drought-State residents now resident in Yakima as recorded by the school survey. The difference arises from the exclusive emphasis of the field survey on persons of agricultural background, whereas the school survey enumerated all families of whatever occupation who had come to Yakima County since 1930 and were still resident there in 1939. Although the new settlers in Yakima came predominantly from the northern Great Plains States, the county had a considerably larger group from the southern Great Plains than had the State as a whole. 9/

Twenty-one of the family heads included in the sample were foreign born, 13 of them from Russia of German-Russian stock. 10/ Fifteen of the 21 foreign-born came from the 2 Dakotas.

8/ The methods of study and the limitations of the sample are discussed on pp. 40-41.

9/ For data on eight sample areas of the State see Richard Wakefield and Paul H. Landis, The Drought Farmer Adjusts to the West, Wash. Agr. Expt. Sta. Bul. 378, Pullman, July 1939. pp. 6-7.

10/ Wakefield and Landis also found a considerable number of German-Russians in their sample areas, offering the explanation that as this nationality group migrated to America relatively late they found only the poorer land remaining for settlement. When the droughts came this poorer land was the first to fail, forcing the migration of its tillers. See op. cit., p. 16

The settlers coming to Yakima were not a chronically restless group, but a fundamentally stable people. For 40 percent of the families their move to the valley was their first and only intercounty move during the entire 11½ years for which their residential history was obtained, and for an additional 30 percent it was the second of 2 moves during this period. Only 11 percent had made more than three intercounty moves during the 11½ years preceding interview. An even more significant indication of their previous stability is the fact that 46 percent of the native-born family heads migrated westward from the same State in which they had been born.

Occupational Background

Before their arrival in Washington, 160 of the enumerated families operated farms. The operation of a farm obviously offers no conclusive evidence of previous satisfactory adjustment, but under the broad assumption that employment as a farm operator represents, in comparison with employment as a farm laborer, a more satisfactory economic position, the families enumerated have in the past enjoyed economic status superior to that which they now enjoy. More than one-fifth of the heads of families had owned a farm and about two-fifths had been tenants. The remainder consisted of wage laborers and unpaid family laborers who constituted 29 percent of the sample, and finally, of a group which had followed nonagricultural occupations during the major portion of the period between 1928 and the time of their departure for Washington.

Of those heads of families who had operated farms, more than 70 percent had operated farms in excess of 140 acres, and 12 percent of all farm operators had operated farms of 700 acres or more.

Recollections of a "Best Off" Period

All persons interviewed were asked to state the period during which they considered themselves "best off." One in every four responding considered himself "best off" at present. These were, for the most part, the younger men who grew to maturity during the depression years and found everywhere a contraction in opportunity. Fifty-six percent remembered a year before 1930 as their most prosperous period.

The "best" years were not all spent in agriculture. While 7 out of 10 persons interviewed were engaged in agriculture during their most prosperous years, 3 persons in 10 were most prosperous when engaged in non-agricultural pursuits. When this figure is compared with the finding that nonagricultural employment was the usual occupation for only 7 percent of all persons interviewed, it would appear that even before widespread depression and drought, nonagricultural employment was relatively advantageous for a significant portion of the enumerated farm population. The figure suggests also the possibility that if more nonagricultural opportunities were available in the valley, a supply of workers with experience previously gained in similar lines of work might be found.

At their most prosperous period half of the new settlers estimated that they were worth \$2,500 or more after deducting the amount of their

indebtedness from the sum of their assets, and one-fourth were worth an estimated \$5,000 or more. As many as 14 percent reported once having had a net worth of \$10,000 or more, but an equal number reported that the net value of all possessions was less than \$500 at their most prosperous period. These latter were particularly the younger families which were first established during the depression years of curtailed opportunity.

Age Composition and Family Size

With regard to the age and size of family, the incoming population differs from the population already resident in the Yakima Valley. New settlers enumerated in the study were younger and their families larger than the population of the valley. In each 5-year age class to age 30, the proportion of population in the newly settled families exceeded the like proportion of the resident population. Compared with the age distribution of the Yakima Valley residents in 1930, 12.4 percent more persons were under the age of 30 among the new settlers (fig. 3).

Approximately half of all families (excluding one-person families) in Yakima County in 1930 consisted of 2 or 3 persons. The corresponding proportion among the recently settled families was only 34 percent. The 2 groups had practically equal proportions of four-person families. Whereas families above 4 persons in size constituted 45 percent of the families of new settlers, they made up only 30 percent of the families resident in the Yakima Valley according to the Census of 1930 (fig. 4).

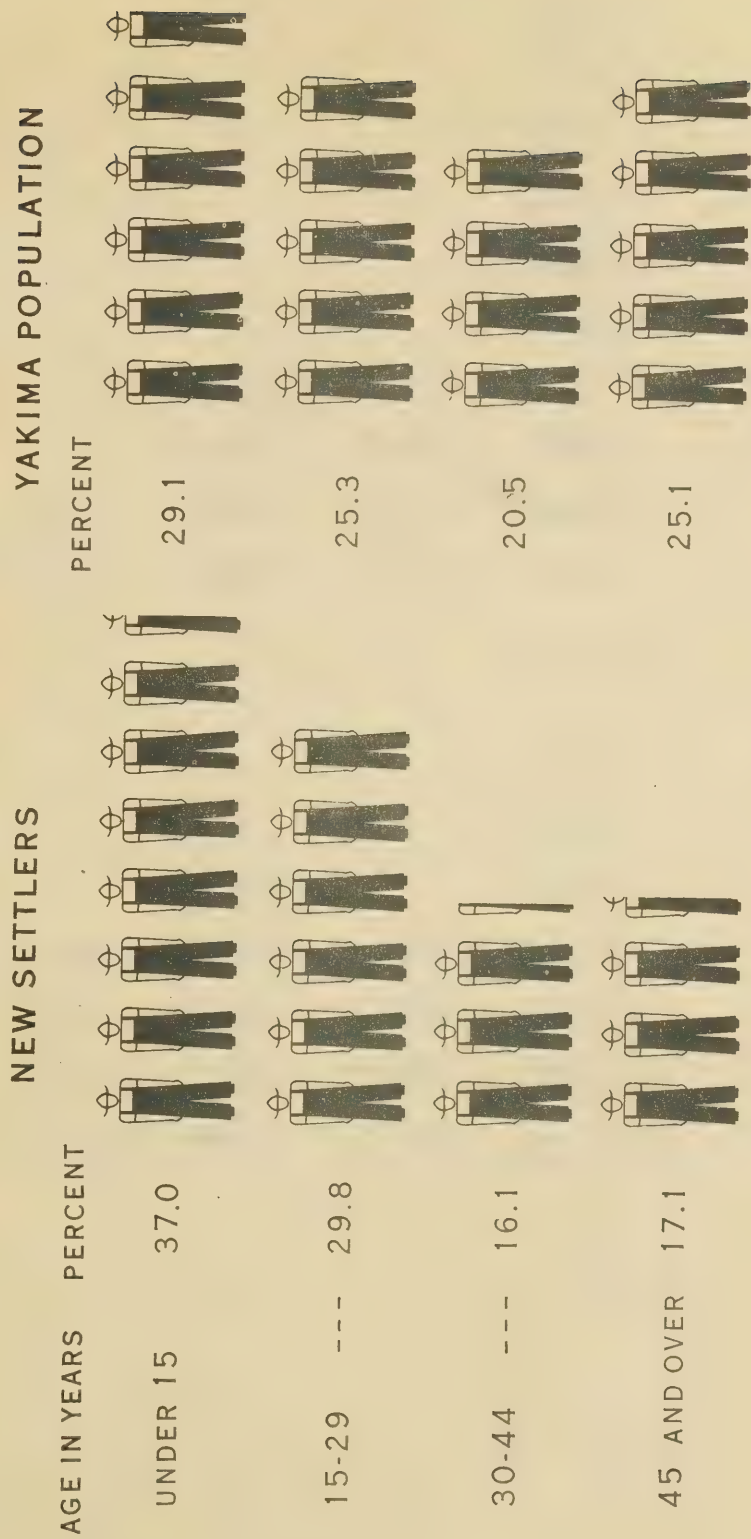
Heads of the families involved in the migration and resettlement with which this study deals were predominantly middle-aged, 54 percent being within the age range 35 to 54, although an appreciable proportion of the family heads, 27 percent, were under 35 years of age.

In this group of families of agricultural background was a high male constituency, considerably higher than either the ratio of males to females found for the population of the entire county in 1930 or the ratio for the county nonfarm population with which nearly all the settlers in the sample should be identified. In the sample there were 113.4 males to 100 females, a ratio which is somewhat higher than that found in the rural farm population of the States from which the majority of new settlers moved. 11/

The data on age, sex, and family composition are clear signs that the new population moving into the valley is more fertile than the population it found there. Apparently it promises an increased strain on existing school facilities and a larger population of working age. The challenge in program building for the valley lies in making adequate use of its abundant human resources.

11/ The relatively high male sex ratio offers additional support to a theory that long-distance migrations tend to involve males in greater proportions than females. See Sorokin, Pitirim and Zimmerman, Carle C. Principles of Rural-Urban Sociology, New York, 1929, p. 597.

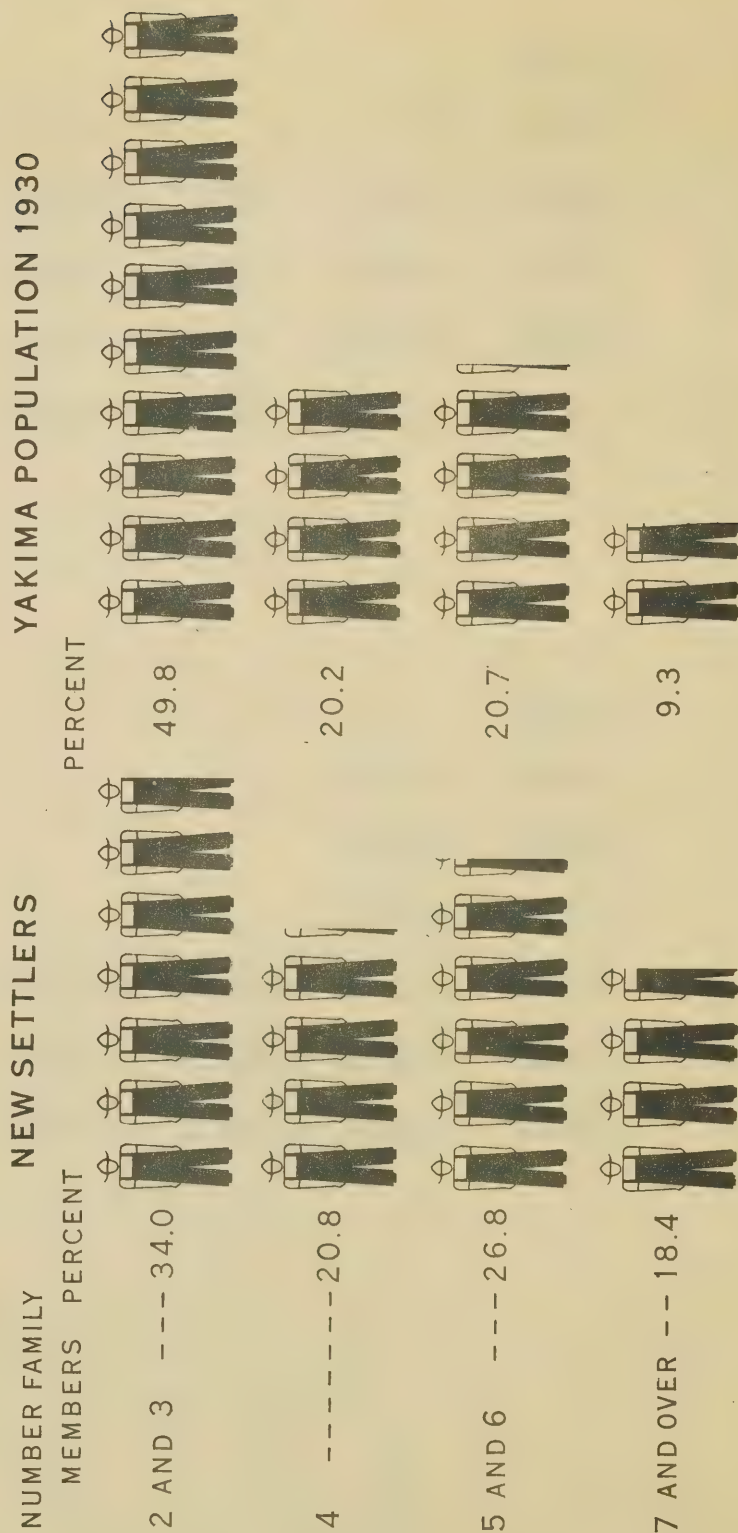
COMPARISON OF THE AGE DISTRIBUTION OF NEW SETTLERS INTERVIEWED IN YAKIMA FIELD STUDY WITH THAT OF YAKIMA COUNTY POPULATION, 1930



Each symbol represents 5 percent of the population

FIGURE 3

COMPARISON OF THE FAMILY SIZE, EXCLUSIVE OF ONE-PERSON FAMILIES, OF NEW SETTLERS INTERVIEWED IN YAKIMA FIELD STUDY WITH YAKIMA COUNTY POPULATION, 1930



Each symbol represents 5 percent of the population

FIGURE 4

Educational Attainments

Members of the newly settled families who had completed their schooling typically had an eighth grade education or less. Only 20 percent of the family heads and 33 percent of the remaining family members had gone beyond the eighth grade in school, whereas 24 percent of the household members and 44 percent of the household heads had stopped their schooling before reaching the eighth grade. 12/

Two-fifths of the migrant children still in school, or 40.3 percent, were retarded 1 or more grades, 10.8 percent being retarded 2 or more grades. Only 1 child had advanced beyond his normal grade. Three conclusions may be drawn: (1) These children had received insufficient training in their home States to equip them for the standards of Washington schools; (2) the mere fact of migration and enrollment in a new school had caused them to be set back at least 1 grade; or (3) they were below the average of their classmates in demonstrated classroom ability.

The Working Population

An average of 2.4 workers 13/ per family were found among the new settlers. The larger families contained more workers, but proportionately fewer of their members than those of the families of below average size worked during the year. Families of 2 members had an average of 1.5 workers each, whereas those of 10 members had an average of 6.5 workers. Those families whose principal source of income was agricultural labor averaged slightly more than 3 workers each; those whose income was derived primarily from nonagricultural employment averaged slightly less than 2 workers per family.

Direct evidence that children often were employed in farm labor is found in the age of the working population. More than one-third (34 percent) of the persons engaged in agricultural labor during the year preceding interview were under the age of 20, whereas only one-sixth (16 percent) of those engaged in nonagricultural industries were of a corresponding age (table 3). Sixty-five percent of the agricultural working population and 55 percent of the nonagricultural were under the age of 35; approximately one-fifth of each group (18 and 21 percent, respectively) were 45 years of age or older.

12/ These percentages indicate a considerably lower educational attainment than that reported by Wakefield and Landis, op. cit., for 2 sample areas of the State. In their sample 30 percent of the heads and 50 percent of the family members had gone beyond the eighth grade, whereas 24 percent and 18 percent respectively, had failed to reach the eighth grade. Unpublished summaries of their data for Yakima County indicate that 23 percent of the family heads had gone beyond the eighth grade and 35 percent had stopped school before reaching that level.

13/ Any person employed for 1 day or more during the year June 1, 1938-May 31, 1939, was considered a worker.

Table 3.- Number and percent of individuals in Yakima field sample working one or more days, June 1938-May 1939 in agricultural and non-agricultural employment, by age, sex, and percentage which each age group constitutes of total working population

Age group	Males					Females					Pct. which	
	Number		Percent			Number		Percent			each age	
	Total:	Workers				Total:	Workers				group is of	
	in	in				in	in				total working	population
	age	Non-	Non-	Non-	age	age	Non-	Non-	Non-	Non-	Agr.	Nonagr.
	group	Agr.	agr.	Agr.	agr.	group	Agr.	agr.	Agr.	agr.	Agr.	Nonagr.
5-9	: 91	15	0	17	0	: 73	7	0	10	0.0	: 5	0
10-14	: 65	17	4	26	6	: 79	19	0	24	0.0	: 9	2
15-19	: 84	51	17	61	20	: 73	30	15	41	21	: 20	14
20-24	: 60	43	19	72	32	: 44	15	15	34	34	: 14	15
25-34	: 73	50	39	69	53	: 70	17	15	24	21	: 17	24
35-44	: 70	46	35	66	50	: 63	21	17	33	27	: 17	24
45-54	: 63	32	22	51	35	: 51	12	9	24	18	: 11	14
55-64	: 35	20	10	57	29	: 30	6	3	24	10	: 6	6
65 & over	: 15	5	3	33	20	: 7	0	0	0	0	: 1	1
Total	: 556	279	149	50	27	: 490	127	74	26	15	: 100	100

A striking indication of the extent of child labor in agriculture is revealed by the fact that 1 in every 6 boys and 1 in every 10 girls of 5 to 9 years included in the newly settled families had worked for pay in farm labor during the year preceding interview (table 3). One-fourth of both the boys and girls of 10 to 14 years similarly had worked in farm crops. These children working in agriculture were employed mainly at peak periods of labor demand in the harvest cycle, especially in the hop harvest. No children of less than 15 years of age were employed during the 5 slack months, November through March, and only 1 was employed in April. As workers under 15 years of age were employed before the close of school and after the reopening of the session in the fall, it can be concluded that the school term is not the final factor determining the absence of child labor during the winter months. Rather, it is the absence of jobs which children can well handle that cuts them out of employment during the winter. Child labor in Yakima can be only an auxiliary means of increasing family earnings, not a source of major, year-round reliance.

One-half of all the male members of the newly settled households and one-fourth of all the female members worked in agricultural employment at some time during the year. The ages from 20 to 44 were those of most widespread employment in farm labor and from 25 to 44 years in nonfarm jobs. Two-thirds or more of the men falling within the ages of 20 to 44 had worked in agricultural jobs at some time during the year, and one-half or more of those aged 25 to 44 had found a certain amount of employment in nonagricultural positions. Women were numbered as workers only about half as frequently as men, except that there was relatively little difference between the sexes in

the proportion of youngsters aged 10 to 19 who were employed in either agricultural or nonagricultural jobs. In the age group 20 to 24 the women surpassed the men in the proportion employed in nonagricultural positions. A close examination of the figures leads to the conclusion that before the age of 15 little differentiation or specialization of employment on the basis of sex occurs, but shortly after that age such a specialization of employment becomes established.

Motives in Migration

Reasons for Leaving Former States.- Well over half of the new settlers mentioned drought as a factor causing them to leave their former State of residence. Resulting crop failure was mentioned by more than a third and feed shortage was frequently named. Unwillingness to endure dust and dust storms incident to the drought was named by one-tenth of the cases.

Lack of employment, mentioned by more than one family in every four, 14/ was the principal economic factor limiting opportunities and thereby causing migration. Other economic causes motivating migration, according to the statements of the family heads, were low farm-crop prices, low wages, farm foreclosures, and inability to rent a farm. A desire "to get off relief" was the expressed motive for nine cases.

Seven out of every 8 refugee families made no attempt to establish a home elsewhere in Washington or in any other western State before settling in Yakima. (Idaho, Oregon, or California were considered western States for purposes of this study.) Of all families coming into the valley, 82 percent arrived during the same calendar year in which they departed from their previous residence. The short period spent in travel suggests strongly that this movement more closely resembles resettlement than any form of transiency.

The few families who attempted to settle elsewhere before coming to Yakima gave up the attempt because of insufficient employment, lack of capital, or such reasons as failing health, a dislike of the location, or dissatisfaction with the climate.

Reason for Coming to the Yakima Valley.- According to the statements of the drought-refugee families the influence of relatives and friends was the main factor inducing them to select the Yakima Valley as their destination. Seven in every 10 families named this as a reason (fig. 5). Many mentioned publicity about the valley, either of the grapevine sort, telling of high wages and abundant labor opportunities, or of the glowingly descriptive type of promotional literature, as having influenced them to come to the valley. Others came avowedly to look for work, and a few came merely by chance.

That the recent settlers in the valley came in search of employment opportunities is strongly indicated in their seasons of arrival. The

14/ Wakefield and Landis presenting data for eight areas in Washington, reported a somewhat lower proportion giving drought as a reason for migration but they also found one-fourth moving because of unemployment and low wages. Op. cit. pp. 22- 23.

PERCENTAGE OF THE NEW SETTLERS INTERVIEWED IN FIELD STUDY WHO MENTIONED SPECIFIED REASONS FOR MOVING TO YAKIMA VALLEY AND WASHINGTON

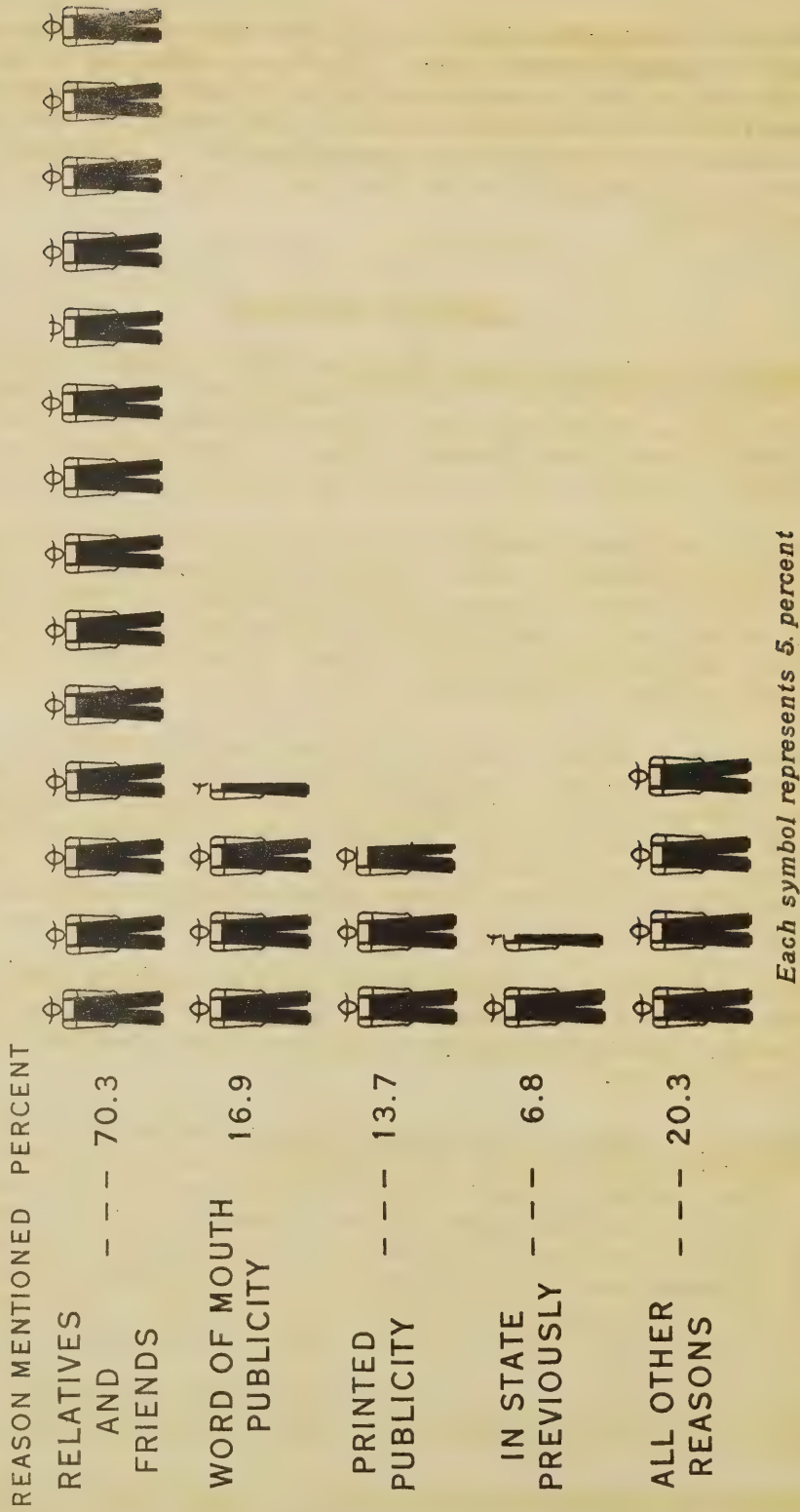


FIGURE 5

majority of the families, 54 percent, arrived in the valley during the 4 months of relatively high employment opportunity, June to September, 31 percent of them during the latter 2 months of this period. In contrast, only 12 percent came during the winter period, November to February, when employment opportunities are at a minimum. It is possible, too, that climatic conditions in the Great Plains during the winter months would discourage migration during this period and thus would affect the season of arrival in Yakima.

Factors Influencing Settlement in Particular Locality.- Relatives and friends continued to exert a considerable influence over the new settlers in telling them of possible places to locate, as half of the families reported that either a kinsman or an acquaintance had first told them about the community where they later located. Others became aware of the location where they eventually settled through systematically looking about the valley at possible sites, through working nearby, or because of advertisements for the sale or rental of property.

Only 22.0 percent of the new settlers reported that the nearness of relatives or friends prompted them to locate where they settled. Availability of work or nearness to work was the consideration most frequently mentioned as a deciding factor. Favorable financial considerations, including cheap land or rent, and easy terms of purchase also were important, being named by a total of 42 percent of the families. A few individuals, without giving any particulars, reported liking the community, while others liked its good soil, a few its nearness to a school, and one, its good water.

ADJUSTMENT OF NEW SETTLERS IN YAKIMA AS MEASURED BY EARNINGS AND EMPLOYMENT

The following analysis of the employment and earnings of the group of recently settled families covered in the report is mainly based on a classification of 234 families according to the principal source of family income. Accordingly, 6 groups have been defined, designated as Agricultural, Industries Allied to Agriculture, Nonagricultural, Work Relief, Cash Relief, and Other. Families whose principal source of income was agricultural labor were classified as the agricultural group; those whose principal source was employment in the canning, packing, or processing of agricultural commodities are shown in the industries allied to agriculture classification, and families whose principal income source was private employment in nonagricultural industries were grouped in a nonagricultural industries classification. Families were not classified as primarily dependent on work relief or cash relief unless their income from public assistance exceeded their income from all private sources combined. The distinction between work relief and cash relief is the familiar distinction between employment on WPA projects and direct relief from public agencies such as the Department of Public Welfare or the Farm Security Administration. The classification "Other" is employed to permit classification of families whose principal source of income was otherwise unclassified, principally various types of accrued pensions. The most populous of these 6 was that of the families whose

principal income was from work relief. Next in size was the group whose major income derived from agriculture, and the third group was that of the families with nonagricultural employment as their principal source of income. These 3 groups comprised more than 85 percent of all families enumerated, the work relief and agricultural groups alone containing 70 percent of all families.

Sources of Family Income

All sources of income yielded an average of \$723 in the year June 1938 to May 1939 to families recently settled in the Yakima Valley. Of this amount \$478 or practically two-thirds came from nonrelief sources. Although a degree of occupational specialization is evident, each income-source group except the group designated as "other" was found to have received some income from each of the several sources. The miscellaneous group, consisting largely of pensioners, derived no income from work relief, probably for reasons of technical ineligibility. In every group except the agricultural group where, by definition, it was the most important source, the second most important source of income was agricultural employment, reflecting both the seasonal availability of such work and its casual nature. But in the case of those families deriving the major share of their income from nonagricultural industries, agricultural employment was of only minor importance, contributing only 5 percent of the total income, whereas for the other major income groups it contributed 11 percent or more of the total income.

Significant differences prevailed in the average earnings of the various income-source groups. Of these the lowest were those dependent on cash relief, the county poor, unemployable for the most part, with an income not much more than half the average income of all families (fig. 6). Next in order of annual income was the agricultural labor group with an income less even than that earned by those employed principally on WPA or work relief. The families whose principal source of income was work relief, although they met the qualifications of need requisite to public assistance, occupied a median position in the income scale. The highest average income belonged to those whose principal source of income was nonagricultural employment.

These data provide some measure of the relative economic disadvantage under which persons employed in agriculture operate. Further evidence appears from an examination of the distribution of the families by their income group and amount of income. Although the average income of the families primarily dependent on agricultural labor was \$640, approximately half of all such families earned less than \$600 for the year. Among nonagricultural families only one-fifth received an income of less than \$600 (table 4). Furthermore, this income represents gross earnings. The cost of finding employment and traveling to and from the job would reduce the real income materially for agriculturally employed families, although such costs ordinarily would not be as great for nonagricultural families.

Taken in their entirety, all 234 families enumerated received \$169,000 from earnings and public assistance in the Yakima Valley in the

AVERAGE ANNUAL TOTAL INCOME OF 234 FAMILIES RECENTLY SETTLED IN YAKIMA VALLEY. CLASSIFIED ON BASIS OF MAJOR SOURCE OF INCOME

DOLLARS

CASH RELIEF --- 381
8 FAMILIES



AGRICULTURE --- 640
76 FAMILIES



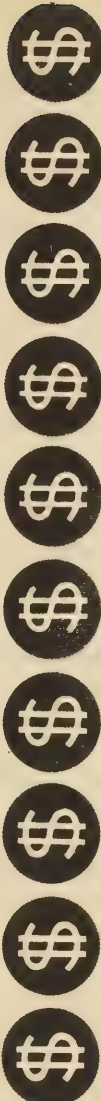
WORK RELIEF --- 672
88 FAMILIES



ALLIED TO
AGRICULTURE --- 855
17 FAMILIES



NONAGRICULTURAL
INDUSTRIES 998
45 FAMILIES



Each symbol represents 100 dollars

FIGURE 6

Table 4.- Frequency distribution of total income by income source groups:
228 1/ migrant families relocated in Yakima, Wash.

Amount of income	:	:	Allied to	:	:	Public assistance	:	Total
	:	Agriculture	agriculture	:	Industry	:		
Under \$400	:	17	1	:	2	:	5	25
\$400 - 599	:	20	2	:	6	:	48	76
600 - 799	:	18	4	:	10	:	24	56
800 - 999	:	10	5	:	5	:	13	33
1,000 - 1,199	:	9	4	:	3	:	4	20
1,200 - 1,399	:			:	5	:	2	7
1,400 - 1,599	:	2	1	:	3	:		6
1,600 - over	:			:	5	:		5
Total	:	76	17	:	39	:	96	228

1/ 6 cases were excluded because of incomplete or inadequate income data.

year from June 1938 to May 1939. Of this amount, 34 percent was contributed by public agencies in the form of relief, 28 percent from agricultural labor, 22 percent from nonagricultural sources, and 10 percent from industries allied to agriculture. The remaining 6 percent came from miscellaneous sources. Although only 28 percent of total income was derived from agricultural labor, virtually two-thirds of all persons gainfully employed worked for some period of time in agriculture. This should not be taken as an indication of lower earnings in agriculture, although it is in part responsible. The greater measure of responsibility belongs to the seasonal nature of agricultural employment.

From one point of view the fact that one-third of all income is provided by public assistance may be considered not only as a subsidy to the resident workers but a subsidy to employers as well. The ability of employers to shift the responsibility of supporting employees to public agencies during periods when no work is available insures a supply of resident workers at no immediate or direct cost to the employer. It is highly probable that residence is made possible through the availability of public assistance during periods of slack employment, and that in the absence of public assistance continued migration in search of employment opportunities would be necessary.

The significance of such a subsidy to employers depends largely on the reliability of a nonresident labor supply in the amount necessary for the harvesting of Yakima Valley crops. In years past a sufficient supply of migratory labor has usually been available. Should alternatives elsewhere improve, the supply of transient workers might well prove insufficient. In such a situation of threatened labor shortage the importance of a resident labor supply, fixed by home ownership and community ties, would be acutely emphasized.

Seasonal Variations in Earnings

The unfavorable income status of agricultural labor families is probably more directly attributable to the seasonality of agricultural employment than to a low wage scale, although both factors are influential. The peak earnings of agricultural workers approximate the peak earnings of workers in other industries more closely than do earnings at any other points of the income cycle. This is true notwithstanding the influence of public assistance in supplementing income from agriculture during the slack season. A comparison of earnings from private sources only, as between agricultural and other industries, would show even more marked distinctions between earnings in agriculture and in other industries at the respective low points in annual earnings.

For the entire group of families 15/ enumerated in the survey January was the month of lowest income, the average being \$45 per family. In each of 3 months, December, January, and February, the families averaged less than \$50 income per month, whereas during the 4 months July-October the average was \$70 or more, reaching a peak of \$78 in September. Thus the average income received in the peak month was practically 70 percent above that received during the low month.

Although agricultural employment accounted for 29 percent of the average income received by all families during the entire period of record, its importance varied widely among the seasons. During the winter months of December, January, and February agricultural employment brought in only 8 or 9 percent of the income, whereas in June and July it accounted for 48 and 47 percent, respectively. Stated in cash terms, the families received an average of \$4 from agricultural employment in December, January, and February and as much as \$33 in July (table 6, Appendix). Income from agricultural sources was almost 10 times greater in the peak month than in the month of lowest opportunity.

The extremely seasonal nature of agricultural earnings requires that other income sources be found during the dull season. The industries allied to agriculture, including packing, canning, and warehouse work, provide some employment, but it too is highly seasonal. Further, its seasonality corresponds closely with that of the agricultural cycle, thus intensifying rather than alleviating the condition of chronic underemployment. The low months in this type of employment were February through May, when the average income received from it was less than 5 percent of the income for those months. The peak months were September and October, when nearly 20 percent of the income came from this source. The cash average of \$14 a month received during the peak period was 7 times the amount received during the 4 dull months. Nonagricultural industries also showed some seasonality, although the difference between the low cash average of \$10 per family in December and January and the high figure of \$17 in May is by no means as great as the seasonality in agricultural earnings. The difficulty is that nonagricultural labor is insufficient to provide widespread employment and level the monthly inequalities in income.

15/ Six families whose income was primarily from "other" sources were omitted from this tabulation.

It is the influence of public-assistance payments which reduces the tremendous seasonality of agricultural earnings to a much smaller spread in total monthly income. Such payments vary approximately contraseasonally to agricultural earnings, minimizing the hardships which would otherwise result from the meager earnings from private employment during the slack season. During the months of December, January, February, and March relief sources provided more than half of the income, whereas during the months of June through October they contributed less than one-fourth of the income.

For the families deriving their major share of income from agricultural employment public assistance was an income source of considerable importance for a few months. In January and February 47 percent of their average income came from public assistance, although during the summer months June to September only 3 percent of the income was derived from relief. For them especially public assistance minimized the tenfold difference between high and low points in the agricultural cycle to approximately a threefold spread in total income, from an average of \$28 in January to an average of \$82 in September (fig. 7). Among all the income groups the families deriving the majority of their income from industries allied to agriculture had the highest single month income of any of the groups, although they also had marked seasonal variations in income. In September they averaged \$105, highest of any groups for any month, but the low months of January, February, and March returned them an income less than half as great as that of the peak month. Consistently throughout the year, except in September and October and the group employed principally in nonagricultural industries had a higher monthly income than any other group. Although they also experienced a substantial seasonal variation in income, the spread was not so great as that found for the other 2 groups receiving their major share of income from private employment. The low months for the nonagricultural group were December and January, when their income averaged \$64, and the high months were July and August, when it averaged \$100. The group of families dependent primarily on public assistance was marked by the most stable monthly income, but one which at the same time was lower than that of any other group during half of the year. Their income range was from a low average of \$51 in January and February to \$66 in September.

Detailed tables showing a distribution of the income of all families and of those principally dependent on agriculture, nonagricultural industries, and public assistance, by months and by source of income are presented in the Appendix (tables 6-9).

Analysis of Periods of Employment

According to present distribution of employment opportunities and so far as can be anticipated in the future, new settlers in the Yakima Valley will find little opportunity for full employment. Changes in levels of farm prosperity will in no important sense change the degree of unemployment for resident farm workers. As the employment pattern is determined by the seasonal nature of agricultural production in the valley rather than by general conditions of depression or prosperity. In each of the winter months more than 60 percent of all families primarily dependent on agricultural labor had no member employed. From May through October less than

AVERAGE MONTHLY INCOME EARNED FROM ALL SOURCES BY NEWLY SETTLED YAKIMA FAMILIES CLASSIFIED ACCORDING TO MAJOR OCCUPATIONAL GROUPS

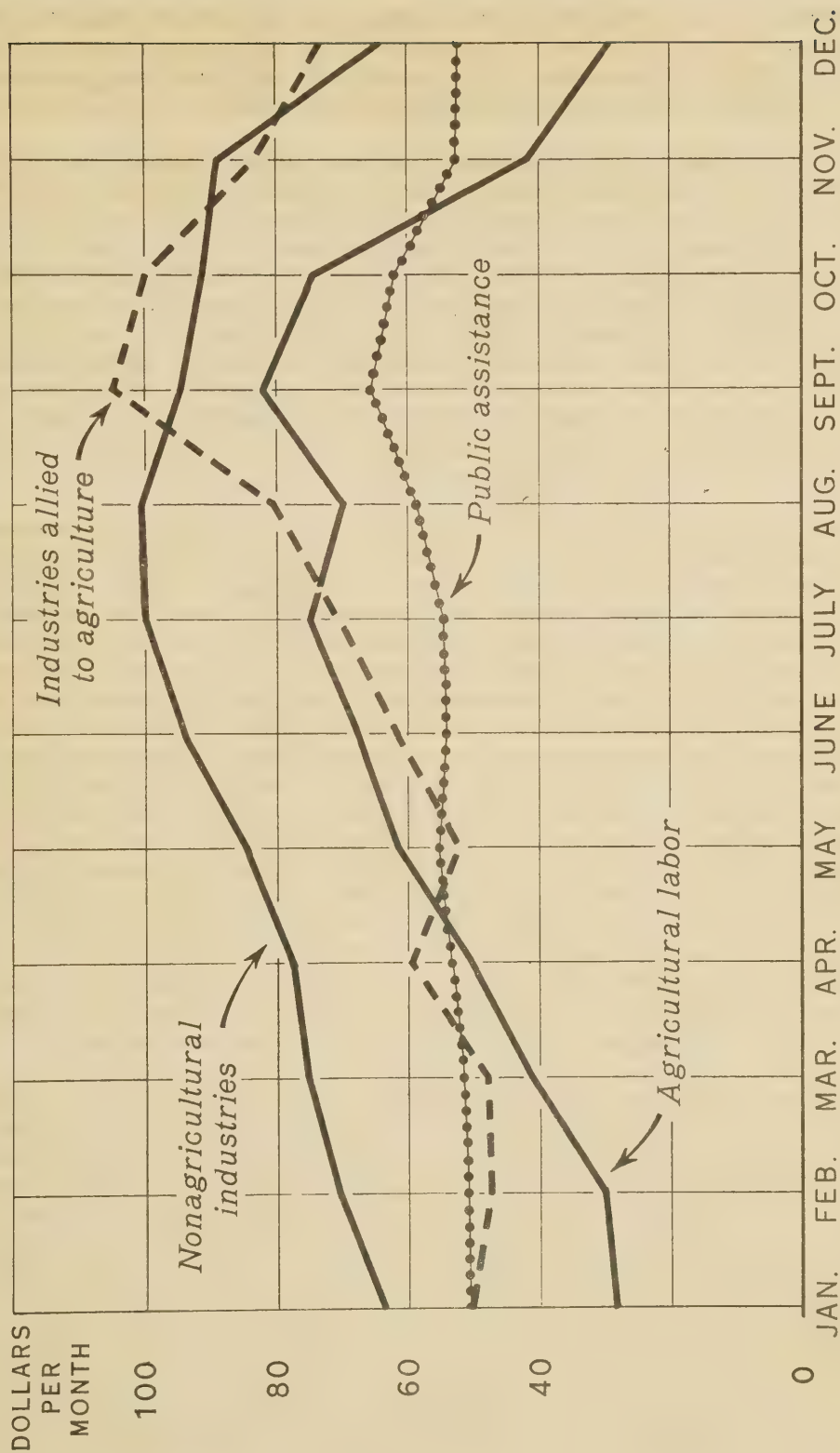


FIGURE 7

20 percent of all families in this group had no member employed, and in the peak month of July only 4 percent had no member employed. For the entire year, by months, an average of 31 percent of all families primarily dependent on agricultural labor had no person employed (table 10, Appendix).

In no other type of industry in the Yakima Valley does a comparable fluctuation in employment occur. Those families primarily dependent upon nonagricultural employment varied from 33 percent with no family member employed in January, to 5 percent in September, October, and November (table 10, Appendix). For families dependent primarily on industries allied to agriculture, the maximum proportion of families with no person employed was 29 percent in January. During the summer months and early fall, all families had at least one member working. Within the group principally dependent on public assistance there was in no month during the year more than 50 percent of the families with a member working in private industry, and during January, February, and March less than 10 percent of the families had any member so employed (table 10, Appendix).

All families classified according to the several income-source groups found their peak periods of employment at approximately the same time of year, the period from July to October. In part, this is a reflection of the stimulus given to other industries by intense agricultural activity. But in greater part, it is a reflection of opportunities for employment in agriculture afforded members of families whose principal source of income was other than agricultural labor. Increased employment and increased earnings came about largely as a result of the increased number of persons employed per family during the peak seasonal agricultural activity rather than through increased man-days of employment per worker (table 11, Appendix). Thus the increased number of man-days of employment per family reflects largely an increased number of workers per family rather than a lengthening of the employment period per worker. The greatest variation occurs in the agricultural families who were employed for 8 man-days in January and February and 40 man-days in September, when the hop harvest reached its height and children were put to work. The small number of man-days employment in the public-assistance group shows only private employment, not WPA work. Families dependent primarily on nonagricultural industries showed the greatest stability in the number of man-days of employment per month.

When family income is classified according to number of workers per family, the influence of additional workers is clearly marked (table 5). Family income rises from an average of \$643 for one-worker families to \$835 for five-worker families with an increase recorded for each intermediate stage. An examination of the sources of income reveals that the economic advantages arising from additional workers in the family are confined to income from agricultural labor, for it is only in this category that any consistent increase is registered as the number of workers increase. With an increase in the number of workers, the percentage of family income derived from agriculture increases until half is derived from this source and the percentage from work relief decreases. The addition to the total number of workers comes in large part through the employment of children. As a consequence, increasing the number of workers adds consistently smaller amounts per worker to the family income.

Table 5.- Average annual income of 234 families recently settled in Yakima Valley according to number of workers per family and percent of income received from each source

		Average amount received from										Percentage received from			
		Number of		Average		: Work : Cash :		: : : : : : : : : : : :		: Work : Cash :		: : : : : : : : : : : :		: Work : Cash :	
workers		families		income		Agr. : Allied:Nonagr.:relief:Other:		Agr. : Allied:Nonagr.:relief:Other:		Agr. : Allied:Nonagr.:relief:Other:		Agr. : Allied:Nonagr.:relief:Other:		Agr. : Allied:Nonagr.:relief:Other:	
						Dol.		Dol.		Dol.		Dol.		Dol.	
None	1	61													
One	81	643				73	38	231	275	10	16	11	6	36	43
Two	81	734				171	120	145	270	16	12	23	16	20	37
Three	32	750				375	53	68	254			50	7	9	34
Four	16	824				400		120	208	33	63	49		14	25
Five or more:	23	885				460		189	154	19	63	52		21	18
All families:	234	723				208	62	166	253	13	21	29	8	23	35

1 27 1

Methods Used in Seeking Employment

In looking for work the new settlers characteristically went from place to place asking if workers were needed, a method which is wasteful of time, money, and energy and one which contributes both to their periods of unemployment and at times to discouragement over the conditions facing them. Two-thirds used this method and another large proportion depended on the grapevine, or information passed by word of mouth, to inform them of chances for work, but this method also is wasteful, as "bum steers" are frequent, and fruitless days of unemployment result. The Yakima Office of the State Employment Service maintains a special division for agricultural labor placements and if it were fully utilized by both employers and employees this office could serve as a valuable clearing house for both laborer and employer. It is difficult for the employment service to contact farm laborers unless it has numerous branch offices, as farm workers ordinarily cannot be reached by telephone and the transportation cost to them of keeping in contact with the central office prevents them from receiving the most effective aid. That the service is not operating efficiently for the new settlers is shown by the fact that although more than 70 percent were registered with the Service, only 2 of the 225 persons responding said they depended upon it to learn of employment opportunities. Further, 92 percent of those registered with it reported that they had never obtained a job through it and an additional 5 percent said that the Service had placed them in only one job. One person, however, reported having obtained 12 jobs through the Service.

To aid the settlers engaged in agricultural labor in seeking work by the methods they used, an automobile was almost indispensable. Four of every 5 families included in the sample owned an automobile, usually a low-priced sedan with an average age of 9 years. Half of the cars were manufactured during the years 1928-30 and only 10 percent were less than 4 years old. While the automobile was necessary for the workers, it was expensive to maintain and consumed important amounts of the family income, reducing considerably the real income received, particularly by the agricultural families.

OTHER MEASURES OF ADJUSTMENT TO YAKIMA

Among other economic factors which provide a measure of the adjustment made by new settlers to a new environment are changes in financial status over a period of several years and progress made toward the goals of land purchase and home ownership.

Changes in Net Worth

Considerable financial progress was made by the new settlers during the average period of 3 years which elapsed between the time of their arrival in the State and the time they were interviewed. On their arrival in Washington nearly three-fourths of the

families had a net worth 16/ of less than \$400 and more than half had less than \$200 17/, whereas at the time they were interviewed they had improved their financial status to the extent that two-thirds showed a net worth of \$200 or more, approximately one-half a net worth of \$400 or more, and 16 percent, \$1,000 or more (fig. 8). Sixteen percent of the families at their arrival and 11 percent at interview had more liabilities than assets.

For the entire group of families interviewed the median increase in net worth between arrival and interview amounted to \$179, or a median annual increase of \$50. While the great majority of the families shared in the prevailing financial progress, more than one-fourth of them (28 percent) underwent a decrease in net valuation between the time of arrival and of interview. Those families who suffered financial reverses were marked by these 4 general characteristics: (1) they had arrived in the State considerably later than the majority and (2) on their arrival reported a relatively high net worth; (3) during the year preceding the interview their income was considerably below average, and (4) few had become owners of real estate.

Property Ownership

Three-fifths of the settlers when interviewed had bought or were then buying their homes and real estate. The longer the new settlers had resided in the State, the greater was the likelihood of their having become landowners. All 29 families arriving before 1934 had become owners of real estate, but the proportion among the later arrivals dropped until only 32 percent of those arriving in 1938 and 1939 had become landowners. It must be recognized that the method of selecting the sample would cause the ratio of property owners to be high. Only a settled group was interviewed and new houses often were the sole clue to the location of new settlers. Thus, the extent of property ownership in the present sample is not likely to be typical of the situation among the bulk of the migrants into the valley.

Lots of one-half, one-quarter or one acre were most commonly bought, as tracts of these sizes were featured in real estate subdivisions. Undeveloped land with good soil and irrigation-water rights commonly sold at around \$500 for a half-acre tract, ranging in price from \$350 to about \$750, and similar 1-acre tracts were sold for as much as \$1,250. Inferior land, excessively rocky in composition or covered with either alkali or spray residue, sold at much lower prices than the better land. The families interviewed in the field paid an average price of \$717 an acre for their land, contracting to pay an average of \$107 a year. This figure represents 17 percent of the average income they received during the year preceding the interview.

16/ The net worth represents the difference between the total value of assets and the amount of outstanding liabilities.

17/ Wakefield and Landis, op. cit., pp. 18-20, for eight sample areas in the State found that 19.1 percent of their cases had a net valuation of \$1,000 or more, 43.7 percent less than \$200 upon arrival.

NET WORTH OF 249 RECENTLY SETTLED FAMILIES IN YAKIMA ON ARRIVAL IN WASHINGTON AND AT TIME OF INTERVIEW



FIGURE 8

The chance to buy land on easy terms greatly facilitated real estate buying by the new settlers. Often they paid either \$5 or \$10 down on a lot and contracted to pay like amounts each month until they gained title to the land. Half of the families interviewed made a down payment of less than \$25 and 74 percent paid less than \$75 down. But one-sixth paid the full price for their land at the time of purchase.

Having land on a secure tenure basis, three-fourths of the landowning families planted a garden in 1939. In contrast, only half as large a proportion of the tenant families had a garden. The garden and livestock enterprise, contributing fresh fruits and vegetables, and milk, eggs, and meat, added substantially to the quality of family living and also appreciably increased the real income of the family.

Dependence upon Public Assistance

It is difficult to overemphasize the influence of public assistance in making adjustments possible. The new settler, characteristically, arrives largely without resources at a time of seasonal employment opportunities. He finds work in the harvest lasting into early October. From October until the subsequent summer is a period of virtually complete unemployment during which his meager reserves are largely dissipated. Winter and spring of the first year of settlement confront new settlers with difficult choices. The claims of food, clothes, and shelter on resources that for three-quarters of all families were less than \$400 at the time of arrival are pressing. For the most part, the only negotiable resource is an automobile and perhaps a trailer. For a family to dispose of its automobile, however, is to sacrifice the major instrument of future livelihood, and such a decision is seldom taken. The wall in which newly arrived families weather their first winter and spring is, as yet, an unelucidated mystery. To some extent emergency help is available in the form of grants from the Farm Security Administration and, to a lesser extent, from the County Welfare Department. To a much greater extent than is usually realized perhaps, there is a fraternity of homeless and recently homeless persons, a fellowship arising out of a common plight. Various types of claims upon the hospitality of already settled families exist. There are the claims of blood or affinal relationship, the claims of friendship, the claims of a common past and a common future. No measure exists of the extent of aid provided through these channels, but in the opinion of social workers familiar with the phenomenon over a period of years it is not insignificant.

Once the winter and spring are endured, employment is again available and with the subsequent winter comes eligibility for relief and with relief a modicum of security. The general effect of WPA employment is to provide a minimum annual wage for its employees and to a considerable extent a minimum monthly wage as well. Much of the stability that recent settlers have attained in the Yakima Valley is directly attributable to the operation of the WPA. This is true not only because of the provision of a minimum wage annually, but perhaps even more so because of the virtual guarantee of a minimum income monthly. It is not a coincidence that 68 percent of all families principally dependent on public assistance have acquired property, whereas families principally

dependent on agricultural labor, earning an average of only \$30 less per year, have acquired property in the proportion of only 45 percent of all families so classified. The difference can be accounted for mainly in terms of the greater regularity of income throughout the year, characteristic of the group principally dependent on public assistance. A further explanation lies in the fact that the costs, mainly those of transportation, of working as agricultural laborers are sizable and the differences in net income between the two groups are greater than the data indicate.

Only 42 families among those interviewed, one-sixth of the total, had never received relief, either in Washington or in other States, whereas two-thirds of the total had received some kind of public assistance during the 12 months preceding the interview. Furthermore, 135 of the 168 families receiving public assistance during the year were strongly dependent on relief, having been employed on the WPA program for at least 4 months or having received at least \$75 in cash relief from the county.

Housing and Household Facilities

Overcrowding was typical in the homes of the new settlers. Although the median family size was 4.3 members, the median number of rooms per home was only 2.6, and 86 percent of the families were living in houses of 4 rooms or less. Together, these facts indicate the seriousness of the housing situation, which is a potential menace to the health of the occupants.

Most commonly the house in which the new settlers were living was found to be an unpainted frame structure with a shingle roof and shiplap or drop siding, all resting on a concrete foundation. Frequently only one year old, the structure was in good condition. But often, tar paper or composition roofs, tongue and groove, tar paper, or shingle sidings, and wooden blocks for foundation support were found. The older houses generally were in poor condition, run-down, unpainted, and poorly ventilated.

Seventy-four percent of the houses were screened as a protection against flies and mosquitoes. One-fifth were served by running water, but only 4 percent of the homes had either a bath or shower, or a flush toilet indoors. In the great majority of cases, the families depended on outdoor wells, usually only 8 to 16 feet deep, or neighborhood faucets for their water, and they relied on outdoor privies instead of more modern but more costly sanitary toilets.

Almost three-fourths of the homes, 71 percent, were wired for electricity, although a few families did not use the service. Slightly more than half of the families, 52 percent, owned a washing machine and almost as many, 48 percent, a sewing machine. A radio was a common sight in the homes of the new settlers, 64 percent of the families having one. It served as the primary medium providing information and entertainment.

Likes and Dislikes about the Valley

More than four of every five settlers interviewed had become sufficiently well adjusted in the valley to have that intangible sense of "feeling at home" there. But they were not universally impressed with the friendliness of their new neighbors, for while a majority, 56 percent, considered the older residents friendly, one-third felt that the long-time residents were definitely unfriendly toward newcomers. The remainder expressed the philosophical view that "people are just about the same everywhere."

In general, the new settlers appreciated the climate, particularly its mildness and its almost complete lack of such disturbances as thunder, hail, or dust storms. Large numbers expressed satisfaction also with the abundance and ready availability of fresh fruit and vegetables, the remarkable productivity of the soils, and the greater quantity of work they were able to obtain. Five percent of the cases apparently had not become adjusted culturally, for they found nothing about the valley they liked, either in the people or in the environment. In contrast, more than one-fourth of the new settlers, 28 percent, said they had found nothing they disliked about the valley. Those who expressed dislikes focused their objections particularly on employment opportunities and labor conditions, including complaints about lack of work, an oversupply of workers, the seasonality of work, a dislike for fruit work, low wages, and the attitude of employers toward their workers.

What the new settlers resented most particularly in the attitude of employers was their treatment of laborers as a lower social class. Having been accustomed to working on another man's farm as an equal, invited into the house for hot dinner at noon, and paid with cash and thanks in the evening, the drought refugees disliked the necessity of carrying their own lunch to work, the feeling that they were ordered around during the day, shown a corner of the field where they could sit to eat their cold lunches, and finally dismissed at night with payment for the day's work. Used to the personal, human relationship in their former communities, they resented the impersonal, business-like relationship in the new.

The new settlers in their reaction to the Yakima Valley often exhibited a wide division of opinion. Some liked irrigation as "making rain when you need it;" others disliked it as dirty and "playing in mud pies." Some felt that the cost of living in the valley was pleasantly low, others that it was exorbitantly high. Some liked the friendliness of the residents, others resented their uncongeniality. Some believed that living in the valley had improved their health, others that it was bad for the health. Such individual differences of opinion, arising out of different backgrounds and experiences, condition the response and the adjustment of the new settlers; for so long as such cultural and psychological likes overbalance dislikes, the individual is likely to be successful in his adjustment, but as soon as dislikes outweigh likes the person may become dissatisfied and seek a new environment to reestablish his personal happiness.

Participation in Organized Social Life

Registration as a voter is an early step toward participation in public affairs, but as a minimum period of residence is specified for this step, the most recently arrived settlers would not have been eligible to make this move toward active citizenship. At least 85 percent of the families had met the minimum-residence requirement, but only 44 percent contained a registered voter. Discouragements and the conditions of migration may have caused them to become apathetic. As four out of five of these same families had contained a registered voter in their States of origin.

The various religious, educational, economic, and fraternal organizations existing in the valley exerted some attraction for the new settlers, but the one with which they most frequently became identified and to which they were most faithful in their attendance was the church. In 35 percent of the families the head was in the habit of attending and in 42 percent some other member also attended services. Many of these individuals were active also in Sunday School or in various church-sponsored organizations. Although 16 families had membership in the Roman Catholic church, the newcomers were overwhelmingly Protestant. Forty-one were in the leading Protestant denominations, 26 in evangelistic or strongly emotional types such as the Nazarene, Pentecostal, and Church of God, and 26 in other minor Protestant denominations such as the Seventh-Day Adventists or the Latter Day Saints. The strongly evangelistic churches, and to some extent the Townsend Clubs and the Workers' Alliance for the comparatively few families they reached, apparently were the chief organized agencies playing an active role in promoting a social life for the rank and file of the new settlers. These organizations comprise in their membership chiefly the dispossessed and economically underprivileged groups. Stratification along economic and occupational lines has developed to a considerable extent in the religious structure of the community. Many of the newcomers who once were Lutherans, Baptists, or Methodists, after their migration to Yakima often become identified with those churches more directly ministering to the poorer classes.

That the new settlers, once they join a church, are loyal to it can be surmised from the fact that, of the church members or participants, 41 percent of the heads and 50 percent of the other family members reported attending all possible meetings and a total of 59 and 69 percent, respectively, attended three-fourths or more of the total number of meetings.

Occasionally the new settlers participated also in other groups, such as the Parent-Teachers Association, the 4-H Club, and other school-identified organizations, but it was almost entirely the women and children who were reached by these organizations. Approximately a dozen family heads and eight family members were identified with either the Workers' Alliance, an A.F. of L. or a C.I.O. Union, a Townsend Club, or any combination of these organizations representing occupational - or economic - interest groups. A few were members of various fraternal orders and a few others of veterans' organizations such as the Veterans of Spanish-American Wars, the American Legion, or their auxiliaries. In the case of none of these organizations except those connected with the schools did the loyalty of the new settlers as measured by attendance approach their loyalty to the churches.

Hopes for the Future

The stabilizing influence of property ties is clearly evident in the expressed intentions of the new settlers with regard to future residence. Three-fourths of the owners but only one-fourth of the tenants expected to remain on the place where they were located when interviewed, and approximately 90 percent of the owners in contrast with approximately 70 percent of the tenants expected to remain in the valley.

The hopes for future activities expressed by the new settlers reveal in some cases the carry-over of old experiences and in other cases a disillusionment bordering on resignation. Two out of five voiced the hope that some day they could operate a farm in the valley. Many others wanted to complete payments on the place they were buying and then trade the property for a larger acreage, while others were content to develop and enlarge the place on which they were then living. Resignation or satisfaction with existing conditions is implied in the answer given by one-fourth of the cases that they were content to continue as they were when interviewed and in the answer given by 13 percent that they would continue to work around the valley. Some wanted to give up farming and farm labor completely in preference to a business or a nonagricultural laboring job. Others, particularly among the tenants, wished to go back to the States from which they came.

In the field, many times the plaintive hope was expressed that "We want to get us a little 5-or 10-acre place where we can raise our own vegetables, meat, chickens and eggs, and have a cow or two." But many of the settlers made it plain that they hardly expected to realize their ambitions. Lack of employment and income discouraged many. "What's the use of planning if you don't have any money to plan with," one explained. If they could maintain their present precarious footing, they felt, at least they would slip no farther down the hill toward financial ruin and personal demoralization. Whatever foothold they had won in the new environment had not been won easily.

CONCLUSIONS

Consideration of the success or failure of new settlement in the Yakima Valley necessarily begins with the economic characteristics of the valley itself. The time has largely passed when personal characteristics of the settlers alone could make or break the success of settlement in such an area. Characteristics of industry, skill, and resourcefulness may gain individuals some preferment, but the sum total of opportunities for present settlers and for future settlement are rigorously determined by the employment opportunities afforded by the valley. Numerous seasonal jobs of short duration attract persons and public assistance enables them to stay.

An examination of the structure of work opportunity allows little optimism over the future prospects of settlers for adequate incomes from private employment. As early as 1936 the number of resident farm workers available was estimated at from 4,000 to 6,000, while opportunities for full

employment existed for no more than 500 persons. All available resident labor could find employment for only 7 weeks during a year. Since 1936 the number of resident laborers has certainly increased.

Furthermore, it is difficult to visualize any changes that might occur to improve the situation significantly. Seasonal unemployment is virtually a social institution in the Yakima Valley and so long as agriculture retains its present characteristics in any significant degree it will always depend on the existence of a reserve army of the unemployed to harvest its crops.

Three possible changes would operate to the advantage of resident laborers - an increase in wage rates, which is possible only after a return of prosperity conditions to agriculture, lengthening of the harvest seasons, and the development of local industries providing opportunities for work during slack seasons of agricultural employment. The first two would not significantly alter the income of persons dependent on agricultural labor, and no indication is found that the third is more than a hope.

No conceivable change in wage rates could convert seasonal earnings into an adequate annual income. Even if such increases in wage rates represented a substantial addition to the income of agricultural laborers, there is every probability that corresponding reductions would be made in the supplemental income which relief agencies now provide. Income would be no more adequate than it is now, assuming no liberalizing of relief standards, but a smaller proportion of the inadequate income would come from public sources.

Some probability of a lengthening of the harvest season in the Yakima Valley is seen. A recent report 18/ forecasts a sharp contraction in the acreage now planted to apple orchards, and new crops will have to be found. The recent introduction of asparagus and wine grapes has met with a considerable measure of success, and both of these crops are currently increasing in acreage. Should the increase reach substantial proportions, additional opportunities for work would be available. In the instance of wine grapes, little lengthening of the employment period would be provided, as the labor requirements would compete directly with those of hops and perhaps with those of apples to some extent. Additional employment opportunities occurring at a period when opportunity already exists for the employment of all resident labor would swell the transient labor force rather than lengthen the season of employment for resident labor. But an increase in the planting of asparagus would provide employment during the spring months for a period in which there is widespread unemployment of resident labor. The volume of work available will be entirely dependent on the extent of new acreage planted to asparagus. The duration of such employment, regardless of volume, would approximate 10 weeks. In itself, the opportunity for an additional 10 weeks work would do little more than reduce the total expenditure for relief. In

18/ Economic Conditions and the Problems of Agriculture in the Yakima Valley. Costs, Income, and Future of Fruit Farming. Washington Agr. Expt. Station and Bureau of Agricultural Economics. In press.

combination with a substantial increase in real wages, some increase in income might result. But each of these possibilities is in itself remote and their joint occurrence is unlikely.

Essentially, the problem arises out of the conflict between a pattern of production that is seasonal in nature and a labor supply that is residually stable. At present, the conflict is reconciled through the medium of public assistance during the inevitable periods of unemployment. It would be idle to observe that the labor requirements of agriculture in the Yakima Valley are best met by migratory labor. The population with which the study is dealing is now a settled population and shows little inclination to accept voluntarily the disadvantages of transient life. Furthermore, there is very serious doubt that net earnings from agricultural labor would be significantly increased by greater mobility. The costs of such employment are extremely high.

The largest group of persons interviewed were those principally dependent on public assistance. Two-thirds of all families received some assistance from one or another of the relief agencies. The average earnings of families primarily dependent on agricultural labor were smaller than those of families primarily dependent on relief. These two groups, amounting to 70 percent of all families, either were principally dependent on relief, or would have profited financially had they been on relief. The only approximately satisfactory economic adjustments have been made by the small group able to find employment outside of agriculture.

Should labor acquire a greater value than it now has it may become necessary to reexamine the circumstances which permit the wastage of labor that is so characteristic of the Yakima Valley. It is possible that the current program of National Defense may find such inefficiencies an unsupportable luxury. Utilization for National Defense of labor supplies in the Yakima Valley would presuppose a large movement of population out of the valley to the centers of defense industries. The possibility also exists of reestablishing large numbers of these families as farmers on Federal projects such as the Columbia Basin Project. Indications are that preference will be given to needy and dispossessed farm families. Both of these suppositions involve movement out of the Yakima Valley and relocation elsewhere.

Barring substantial changes in the economy of the valley, it is likely that some type of public assistance will be found necessary to assist the newly settled population in remaining settled. It is probable that a rural public works program would better meet the needs of a rural population and would serve broader social purposes than the prevailing forms of public assistance. But at present, almost no signs of developments which would be significant enough to release the new settlers from a substantial measure of dependence on public assistance are noted.

Meanwhile these newcomers have located in the valley and are intent upon making it their home. They are there because opportunities in the valley seemed to them much better than the drought - and depression--limited opportunities that confronted them in their old homes. Even though they may be dependent on relief for subsistence, the income they receive often is greater than that which many of them received for a number of years

on the Plains. The climate of the valley is immeasurably more attractive to them than that of the Plains. Other factors such as the abundance of fresh fruits and vegetables in the valley also appeal to them. While they find a number of things they dislike, particularly with regard to conditions of employment, they feel that by and large they are much better off here than they were on the Great Plains. No doubt they write back to their relatives and friends urging them to come out to the West Coast to live. One effect of such correspondence will be to keep alive in the minds of many residents of the northern Great Plains the thought of migration to the Pacific Northwest, thus resulting in a continuing flow of migrants from those States to the Yakima Valley and Washington.

The backgrounds of the newcomers, their attitudes, their participation in organizations and their population characteristics all have significance for the valley. The fact that the newcomers include a large proportion of young people has its implications for the school system, as educational facilities must be provided for those of school age. A large proportion of the newcomers have a relatively inferior education, that often limits their range of employment possibilities to the lower paid laboring jobs. The age composition of the migrant group has its repercussions on the labor market as well, for the working population is predominantly youthful and middle-aged. Should opportunities for both regular and vocational schooling and for employment alike be lacking, some substitutes must be devised to make constructive use of the human resources which otherwise would be wasted.

Measures devised to assist the newcomers in making adjustments to the valley must take into account the backgrounds and attitudes which influence their acceptance of aid. A liberalizing of credit facilities, for example, would appeal to many, but others would not avail themselves of it, as they have declared to themselves that they will never again go into debt for anything after their unfortunate experiences with mortgages and loans during the early 1930's back on the Plains. Accustomed to a life of stability, most of the newcomers would not take heartily to suggestions that they migrate in search of work. Landownership has been their symbol of status and security and in the new environment they try to reproduce that culture by striving for ownership of land, however small the tract. A general realization of the effects of such customs and attitudes in conditioning the adjustment of the newcomers should be helpful.

The crowded housing situation and certain aspects of the sanitation problem are worthy of the serious consideration of leaders of the community. In the interests of local health and welfare some sort of assistance probably is desirable. The various federal housing programs are not reaching these poorer people, who nonetheless require assistance if they are to have houses which may be considered modern and adequate for family needs.

As a result of the economic situation which has placed the newcomers in competition with long-time residents and with migratory workers for available jobs, discriminations and resentments against "dust bowlers" have developed. The effect is to handicap further the complete adjustment of the newcomers, for they are assigned a status as a distinct group in the economy of the valley and at times find it difficult to overcome the prejudices which have developed concerning their standards of living, their

industry, and their capabilities. Actually, of course, the "dust bowlers" are of the same general racial stock and come from approximately the same States as the long-time residents, and their cultural heritage and basic traditions are essentially identical with those of the valley. The differences arise almost solely from the period of arrival and the available opportunities for newcomers. As soon as the new settlers are accorded a status of equality, as they are in the evangelistic churches, the Townsend Clubs, the Workers' Alliance, and the WPA, their prospects for a successful psychological and cultural adjustment will be materially enhanced.

Table 6.- Average 1/ annual family income received, June 1938 - May 1939,
by 228 2/ families recently settled in the Yakima Valley,
distributed by months 3/ and by sources of income

Month	Industrial earnings					Public assistance			
	All	Allied			Non-				Miscel-
	sources	Total:	Agr.:	to Agr.:	agr.	Total :	WPA :	Other:	aneous
	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.
Jan.	45	18	4	4	10	26	21	5	1
Feb.	47	19	4	2	13	27	22	5	1
Mar.	52	24	8	2	14	26	22	4	2
April	57	30	12	2	16	25	23	2	2
May	62	38	19	2	17	22	21	1	2
June	66	48	31	3	14	17	16	1	1
July	70	53	33	4	16	16	15	1	1
Aug.	71	52	29	7	16	18	17	1	1
Sept.	78	60	31	14	15	17	16	1	1
Oct.	74	55	27	14	14	18	17	1	1
Nov.	58	35	10	10	15	22	19	3	1
Dec.	48	22	4	8	10	25	21	4	1
All									
months	728	454	212	72	170	259	230	29	15

1/ Average based on all families regardless of whether actually employed in the particular industry or month.

2/ Six families whose main source of income was other than agricultural, allied to agriculture, nonagriculture, or public assistance employment were excluded from this tabulation.

3/ Income amounting to an average of \$11 could not be distributed by months.

Table 7.- Average 1/ annual family income, June 1938 - May 1939, by months 2/ and sources, 76 families recently settled in the Yakima Valley, and principally dependent on agricultural labor

Month	: Industrial earnings : Public assistance :									
	: All :		: Allied: Non- :				: Total :		: Other: :	
	sources	Total:	Agr.:	to Agr.:	agr.:	Total	WPA	Other:	Miscel-	laneous
	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.
Jan.	28	15	10	2	3	13	5	8		
Feb.	30	16	13		3	14	7	7		
March	41	28	22	1	5	13	6	7		
April	50	38	31	2	5	12	11	1		
May	61	49	44	1	4	12	11	1		
June	68	65	65			2	2			1
July	75	73	72	1		2	2			
Aug.	69	67	63	3	1	2	2			
Sept.	82	77	58	7	2	3	2	1		2
Oct.	74	70	58	9	3	3	3	0		1
Nov.	42	32	24	6	2	9	4	5		1
Dec.	29	17	10	4	3	11	5	6		1
All										
months	649	547	480	36	31	96	60	36		6

1/ Average based on all families, regardless of whether actually employed in the particular industry or month.

2/ Income amounting to an average of \$13 could not be distributed by months.

Table 8.- Average 1/ annual income family received June 1938 - May 1939, by 39 families recently settled in the Yakima Valley and principally dependent on nonagricultural industries, distributed by month 2/ and by source of income

	Industrial earnings					Public assistance				
	All			Allied	Non-				Miscel-	
Month	sources	Total	Agr.	to Agr.	agr.	Total	WPA	Other	laneous	
	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	
Jan.	63	54		4	50	6	4	2	3	
Feb.	71	61		1	60	7	5	2	3	
March	75	66		1	65	6	5	1	3	
April	77	71		1	70	5	4	1	1	
May	85	77	5	1	71	5	3	2	3	
June	94	89	12	1	76	4	3	1	1	
July	100	96	8	2	86	3	2	1	1	
Aug.	100	96	7	5	84	3	2	1	1	
Sept.	95	91	9	5	77	2	1	1	2	
Oct.	91	87	9	4	74	2	1	1	2	
Nov.	89	85	4	8	73	3	2	1	1	
Dec.	64	58		5	53	4	3	1	2	
All months	1004	931	54	38	839	50	35	15	23	

1/ Average based on all families regardless of whether actually employed in the particular industry or month.

2/ Income amounting to an average of \$11.02 could not be distributed by months.

Table 9.- Average 1/ annual family income received June 1938 - May 1939, by 96 families recently settled in the Yakima Valley and principally dependent on public assistance, distributed by months 2/ and source

Month	Industrial earnings					Public assistance			
	All	Allied			Non-				Miscel-
	sources	Total	Agr.	to Agr.	agr.	Total	VPA	Other	aneous
	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.
Jan.	51	1		1	0	48	44	4	2
Feb.	51	1		1		48	44	4	2
March	52	2	1		1	49	45	4	1
April	53	4	2		2	48	45	3	1
May	55	13	6	1	6	41	39	2	1
June	54	16	14		2	37	35	2	1
July	55	17	14	1	2	37	35	2	1
Aug.	59	18	12	2	4	40	38	2	1
Sept.	66	27	14	10	3	38	36	2	1
Oct.	62	23	12	9	2	38	36	2	1
Nov.	53	8	3	4	1	44	42	2	1
Dec.	52	4		3	1	47	44	3	1
All months	663	134	78	32	24	515	483	32	14

1/ Average based on all families regardless of whether actually employed in the particular industry or month.

2/ Income amounting to an average of \$4 could not be distributed by months.

Table 10.- Percentage of families recently settled in Yakima classified by main source of income, having specified number of workers, by months, June 1938-May 1939

Month	No workers			One worker			Two workers			Three or more workers		
	Agr. : Pct.	Non- agr. : Pct.	Public Assist. : Pct.	Agr. : Pct.	Non- agr. : Pct.	Public Assist. : Pct.	Agr. : Pct.	Non- agr. : Pct.	Public Assist. : Pct.	Agr. : Pct.	Non- agr. : Pct.	Public Assist. : Pct.
January	63.2	33.3	91.7	28.9	46.2	6.2	5.3	15.4	2.1	2.6	5.1	0.0
February	64.5	23.1	93.7	25.0	53.8	4.2	9.2	23.1	2.1	1.3	0.0	0.0
March	44.8	23.1	91.7	38.2	53.8	7.3	11.8	23.1	1.0	5.2	0.0	0.0
April	28.9	15.4	86.5	47.4	64.1	10.4	13.2	20.5	3.1	10.5	0.0	0.0
May	18.4	12.8	67.6	40.8	61.6	21.9	25.0	17.9	8.4	15.8	7.7	2.1
June	10.5	7.7	57.3	38.1	69.2	30.2	21.1	12.8	9.4	30.3	10.3	3.1
July	3.9	5.1	60.4	47.4	64.1	29.2	26.3	17.9	4.2	22.4	12.9	6.2
August	10.5	7.7	55.2	40.9	61.5	32.3	23.7	17.9	8.4	24.9	12.9	4.1
September	5.3	5.1	50.0	35.5	64.1	29.2	30.3	20.5	15.7	28.9	10.3	5.1
October	15.8	5.1	54.2	34.2	66.7	32.3	30.3	20.5	12.5	19.7	7.7	1.0
November	40.8	5.1	81.2	42.1	71.8	12.5	7.9	15.4	6.3	9.2	7.7	0.0
December	61.9	23.1	88.5	27.6	59.0	8.4	7.9	12.8	3.1	2.6	5.1	0.0
All months	30.7	13.9	73.2	37.2	61.3	18.7	17.7	18.2	6.4	14.4	6.6	1.7

Table 11.- Average number of persons working per family by months and average number of man-days employment per family and per worker, by months, among 211 recently settled families classified by major source of income, June 1, 1938-May 31, 1939

Month	Average number persons working per family			Average Man-days of employment per family			Average days of employment per worker		
	: Non- :Public			: Non- :Public			: Non- :Public		
	: Agr.:	Agr.:	: Assist.	: Agr.:	Agr.:	: Assist.	: Agr.:	Agr.:	: Assist.
Jan.	: 0.5	0.9	0.1	: 8.0	17.4	1.1	: 16.0	19.3	11.0
Feb.	: 0.5	1.0	0.1	: 7.8	18.9	0.6	: 15.6	18.9	6.0
March	: 0.8	1.0	0.1	: 12.7	19.0	0.7	: 15.9	19.0	7.0
April	: 1.1	1.1	0.2	: 17.3	18.7	2.4	: 15.7	17.0	12.0
May	: 1.5	1.2	0.4	: 24.4	23.4	5.1	: 16.3	19.5	12.8
June	: 2.0	1.3	0.6	: 34.8	24.5	7.1	: 17.4	18.8	11.8
July	: 1.9	1.5	0.6	: 34.9	27.0	6.6	: 18.4	18.0	11.0
Aug.	: 2.0	1.5	0.7	: 35.1	27.2	8.2	: 17.6	18.1	11.7
Sept.	: 2.3	1.5	0.9	: 40.3	28.6	12.0	: 17.5	19.0	13.3
Oct.	: 1.8	1.3	0.6	: 29.7	27.0	8.8	: 16.5	20.8	14.7
Nov.	: 0.9	1.3	0.2	: 14.3	26.8	3.3	: 15.9	20.6	16.5
Dec.	: 0.5	1.0	0.1	: 8.4	18.6	1.6	: 16.8	18.6	16.0
All months	: 1.3	1.2	0.4	: 22.3	23.1	4.8	: 17.1	19.3	12.0

